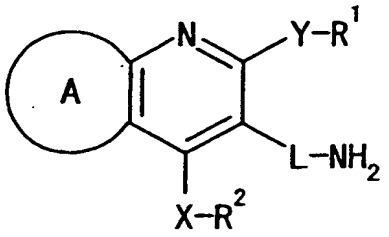
Claims

1. A compound represented by the formula



(I)

wherein

ring A is an optionally substituted 5- to 10-membered aromatic ring;

R^1 and R^2 are the same or different and each is an optionally substituted hydrocarbon group or an optionally substituted heterocyclic group;

X and Y are the same or different and each is a bond, -O-, -S-, -SO-, $-SO_2-$ or $-NR^3-$ (R^3 is a hydrogen atom or an optionally substituted hydrocarbon group); and

L is a divalent hydrocarbon group,

or a salt thereof.

2. The compound of claim 1, wherein the 5- to 10-membered aromatic ring for ring A is a benzene ring.

3. The compound of claim 1, wherein the ring A is a 5- to 10-membered aromatic ring optionally having 1 to 3 substituents selected from

(1) a halogen atom;

(2) a nitro group;

(3) a cyano group;

(4) an alkylenedioxy group having 1 to 3 carbon atoms;

(5) an alkyl group having 1 to 10 carbon atoms or an alkenyl group having 2 to 10 carbon atoms, each optionally having 1 to 3 substituents selected from a halogen atom, a hydroxy group,

a carboxyl group, an alkoxycarbonyl group having 2 to 8 carbon atoms, a carbamoyl group, a cyano group, an amino group, an alkylcarbonylamino group having 2 to 8 carbon atoms, an alkoxycarbonylamino group having 2 to 8 carbon atoms and an alkylsulfonylamino group having 1 to 8 carbon atoms;

(6) an optionally substituted hydroxy group;

(7) an acyl group;

(8) an optionally substituted amino group;

(9) an optionally substituted cycloalkyl group having 3 to 10 carbon atoms;

(10) an aryl group having 6 to 14 carbon atoms;

(11) an optionally substituted thiol group;

(12) an optionally substituted heterocyclic group; and

(13) an amidino group.

4. The compound of claim 1, wherein R^1 is an alkyl group having 1 to 10 carbon atoms which is optionally substituted by a cycloalkyl group having 3 to 10 carbon atoms.

5. The compound of claim 1, wherein X is a bond.

6. The compound of claim 1, wherein Y is a bond.

7. The compound of claim 1, wherein the divalent hydrocarbon group denoted by L is an alkylene group having 1 to 10 carbon atoms.

8. The compound of claim 1, wherein R^2 is an alkyl group having 1 to 10 carbon atoms, an aryl group having 6 to 14 carbon atoms or an aralkyl group having 7 to 13 carbon atoms, each optionally having 1 to 3 substituents selected from halogen atom, hydroxy group, nitro group, amino group, optionally halogenated alkyl group having 1 to 6 carbon atoms, alkoxy

group having 1 to 6 carbon atoms, aromatic heterocyclic group and cycloalkyl group having 3 to 10 carbon atoms.

9. The compound of claim 1, which is (2E)-3-[3-(aminomethyl)-2-isobutyl-4-(4-methylphenyl)quinolin-6-yl]acrylamide;
5-{[3-(aminomethyl)-2-isobutyl-4-(4-methylphenyl)quinolin-6-yl]oxy}pentanoic acid;
4-[3-(aminomethyl)-2-isobutyl-4-(4-methylphenyl)quinolin-6-yl]piperazin-2-one;
1-[3-(aminomethyl)-2-isobutyl-4-(4-methylphenyl)quinolin-6-yl]piperazine-2,5-dione;
or a salt thereof.

10. A pharmaceutical agent comprising a compound of claim 1 or a prodrug thereof.

11. The pharmaceutical agent of claim 10, which is a prophylactic or therapeutic agent of diabetes.

12. The pharmaceutical agent of claim 10, which is a prophylactic or therapeutic agent of diabetic complications.

13. The pharmaceutical agent of claim 10, which is a prophylactic or therapeutic agent of impaired glucose tolerance.

14. The pharmaceutical agent of claim 10, which is a prophylactic or therapeutic agent of obesity.

15. A peptidase inhibitor comprising a compound of claim 1 or a prodrug thereof.

16. The inhibitor of claim 15, wherein the peptidase is

dipeptidyl dipeptidase IV.

17. A method for the prophylaxis or treatment of diabetes in a mammal, which comprises administering a compound of claim 1 or a prodrug thereof to the mammal.

18. A method for the prophylaxis or treatment of diabetic complications in a mammal, which comprises administering a compound of claim 1 or a prodrug thereof to the mammal.

19. A method for the prophylaxis or treatment of impaired glucose tolerance in a mammal, which comprises administering a compound of claim 1 or a prodrug thereof to the mammal.

20. A method for the prophylaxis or treatment of obesity in a mammal, which comprises administering a compound of claim 1 or a prodrug thereof to the mammal.

21. A method for inhibiting peptidase in a mammal, which comprises administering a compound of claim 1 or a prodrug thereof to the mammal.

22. Use of a compound of claim 1 or a prodrug thereof for the production of a prophylactic or therapeutic agent of diabetes.

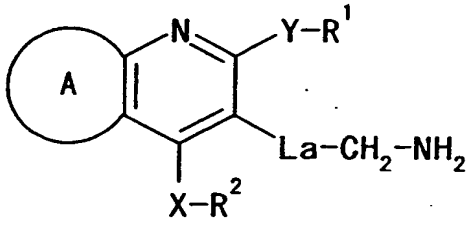
23. Use of a compound of claim 1 or a prodrug thereof for the production of a prophylactic or therapeutic agent of diabetic complications.

24. Use of a compound of claim 1 or a prodrug thereof for the production of a prophylactic or therapeutic agent of impaired glucose tolerance.

25. Use of a compound of claim 1 or a prodrug thereof for the production of a prophylactic or therapeutic agent of obesity.

26. Use of a compound of claim 1 or a prodrug thereof for the production of a peptidase inhibitor.

27. A method of producing a compound represented by the formula



(I-a)

wherein

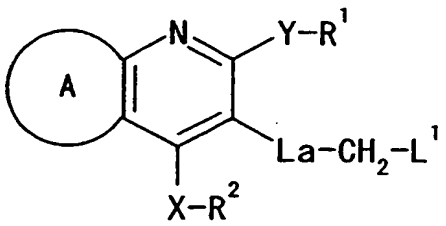
ring A is an optionally substituted 5- to 10-membered aromatic ring;

R^1 and R^2 are the same or different and each is an optionally substituted hydrocarbon group or an optionally substituted heterocyclic group;

X and Y are the same or different and each is a bond, -O-, -S-, -SO-, $-SO_2-$ or $-NR^3-$ (R^3 is a hydrogen atom or an optionally substituted hydrocarbon group);

La is a bond or a divalent hydrocarbon group,

or a salt thereof, which comprises reacting a compound represented by the formula

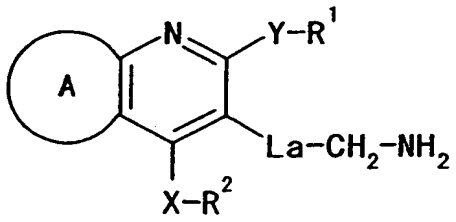


(IV)

wherein L^1 is a leaving group, and other symbols are as defined

above, or a salt thereof with an aminating agent.

28. A method of producing a compound represented by the formula



(I-a)

wherein

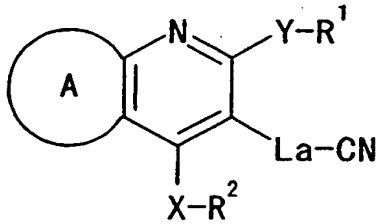
ring A is an optionally substituted 5- to 10-membered aromatic ring;

R^1 and R^2 are the same or different and each is an optionally substituted hydrocarbon group or an optionally substituted heterocyclic group;

X and Y are the same or different and each is a bond, -O-, -S-, -SO-, $-SO_2-$ or $-NR^3-$ (R^3 is a hydrogen atom or an optionally substituted hydrocarbon group);

La is a bond or a divalent hydrocarbon group,

or a salt thereof, which comprises subjecting a compound represented by the formula



(VIII)

wherein the symbols in the formula are as defined above, or a salt thereof to reduction reaction.